

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Amendment of Part 101 of the Commission's	)	WT Docket No. 10-153
Rules to Facilitate the Use of Microwave for	)	
Wireless Backhaul and Other Uses and to	)	
Provide Additional Flexibility to Broadcast	)	
Auxiliary Service and Operational Fixed	)	
Microwave Licensees	)	
	)	
Request for Interpretation of Section	)	
101.141(a)(3) of the Commission's Rules Filed	)	WT Docket No. 09-106
by Alcatel-Lucent, Inc., <i>et al.</i>	)	
	)	
Petition for Declaratory Ruling Filed by	)	WT Docket No. 07-121
Wireless Strategies, Inc.	)	
	)	
Request for Temporary Waiver of Section	)	
101.141(a)(3) of the Commission's Rules Filed	)	
by Fixed Wireless Communications Coalition	)	

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**COMMENTS OF DTV NORWICH, LLC**

DTV Norwich, LLC ("DTVN"), by its attorneys, hereby submits its comments in response to the Commission's *Notice of Proposed Rulemaking and Notice of Inquiry* regarding the amendment of Part 101 of the Commission's rules to facilitate the use of microwave for wireless backhaul and other uses and to provide additional flexibility to broadcast auxiliary service and operational fixed microwave licensees.<sup>1</sup> In particular,

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<sup>1</sup> *In the Matter of Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Service and Operational Fixed Microwave Licensees*, Notice of Proposed Rulemaking and Notice of Inquiry, WT Docket No. 10-153, FCC 10-146 (rel. Aug 5, 2010) (the "*Part 101 NPRM/NOI*").

DTVN, as the holder of 45 licenses in the Multichannel Video Distribution and Data Service (“MVDDS”), responds to the Commission’s request in the *NOI* portion of the proceeding for comment on whether the agency “should examine any additional modification to the Part 101 rules, or other policies or regulations, to promote flexible, efficient and cost-effective provisions of wireless backhaul service.”<sup>2</sup> As discussed more fully below, DTVN submits that the Commission should initiate a rulemaking designed to allow MVDDS licensees the flexibility to use increased power levels to, at minimum, provide wireless backhaul services on a point-to-point basis.

I. The Commission Has Identified a Need for Additional Wireless Backhaul Capacity

In the *Part 101 NPRM/NOI*, the Commission concluded that the demand for wireless backhaul capacity is increasing and that “cost-efficient access to adequate backhaul . . . will be a key factor in promoting robust competition in the wireless marketplace.”<sup>3</sup> The agency recognized that the creation of additional, cost-effective and flexible microwave services will help increase deployment of enhanced mobile broadband networks throughout the country.<sup>4</sup> Accordingly, the Commission’s goal in the proceeding is to “explore ways to increase the flexibility, capacity, and cost-effectiveness of microwave bands located below 13 GHz, while protecting incumbent licensees in these bands.”<sup>5</sup>

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<sup>2</sup> *Part 101 NPRM/NOI* at ¶ 68.

<sup>3</sup> *Part 101 NPRM/NOI* at ¶ 2.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.* at ¶¶ 3-4.

## II. MVDDS Offers an Opportunity to Meet the Need

The Commission established MVDDS for terrestrial re-use of the 12.2-12.7 GHz band, which also is allocated to the Direct Broadcast Satellite (“DBS”) service and other services to facilitate the delivery of new competitive broadband and other communications services in markets throughout the United States.<sup>6</sup> MVDDS licensees are authorized to provide any fixed non-broadcast service.<sup>7</sup> While recognizing the important need for increased wireless backhaul capacity, the Commission chose not to explore the feasibility of using the 12.2 to 12.7 GHz spectrum used by MVDDS because of the “important limitations” caused by the licensing of the band on a co-primary basis to MVDDS, DBS and NGSO operations.<sup>8</sup> DTVN submits, however, that its testing and analysis of MVDDS operating parameters indicate that it is feasible to use terrestrial MVDDS capacity to provide point-to-point-services at higher power while protecting the operations of other incumbent licensees.

In 2004, DTVN was the successful bidder for MVDDS licenses in 45 markets.<sup>9</sup> Since that time, DTVN has conducted trials designed to test the feasibility of MVDDS

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<sup>6</sup> *Amendment of Parts 2 and 25 of the Commission’s Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range*, Memorandum Opinion and Order and Second Report and Order, 17 FCC Rcd 9614 (2002).

<sup>7</sup> 47 C.F.R. § 101.1407.

<sup>8</sup> *Part 101 NPRM/NOI*, *supra* at ¶ 12, n. 27. There, the Commission stated that the band is allotted on a primary basis to DBS. However, the band has been licensed on a co-primary basis. *See, e.g., In the Matter of Requests of Ten Licensees of 191 Licenses in the Multichannel Video and Data Distribution Service for Waiver of the Five-Year Deadline for Providing Substantial Service*, Order, DA 10-1378 (rel. July 28, 2010) at ¶ 2 (“MVDDS Waiver Order”). To DTVN’s knowledge, there currently are no entities holding licenses for NGSO operations in the band.

<sup>9</sup> *Multichannel Video Distribution and Data Service Spectrum Auction Closes, Winning Bidders Announced*, FCC Public Notice, 19 FCC Rcd 1834 (Feb. 2, 2004). DTVN paid a total of \$84,610,300 for MVDDS licenses in 45 markets in 2004’s Auction 53, which represented more than 70% of the agency’s total net proceeds from the auction. DTVN secured MVDDS authorizations to provide service in New York, Los Angeles, Chicago, Philadelphia, and San Francisco, among other large markets.

service under various operational parameters.<sup>10</sup> Based on its experiences to date, DTVN has determined that the optimal use of the MVDDS spectrum, which is subject to significant attenuation, varies depending on the characteristics of a particular market. Among other things, it has concluded that terrain, foliage, building height and density, and other factors may serve to limit the use of MVDDS operations on a point-to-multipoint basis in certain markets.

Because of these limitations, DTVN also has explored using MVDDS spectrum to provide point-to-point services. As a result, DTVN believes that, particularly in urban markets—where the Commission has found the need for additional backhaul capacity to be at its greatest—the very factors that make it difficult to provide viable point-to-multipoint operations, will help to reduce potential interference of point-to-point operations to other users of the band. Not only will the highly directional antennas that would be utilized to provide point-to-point service limit the potential scope of interference, but the terrain, buildings, foliage and other factors that limit reception also will help to “shield” the receive antennas of other users.

DTVN also has determined, however, that, at existing power levels, the point-to-point path “hops” would simply be too short to be economically viable. Accordingly, in order to utilize the spectrum to its fullest, increased power would be needed. DTVN believes that higher power can be accommodated without causing impermissible interference. It is important to note that, to date, DTVN has not received a single complaint that its operations have in any way affected the reception of DBS service by any consumer. These results show that the theoretical models and conservative

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<sup>10</sup> See, e.g., MVDDS Waiver Order, *supra* note 8, at ¶ 11, n. 54.

assumptions the Commission made in authorizing the power limits for MVDDS service have proven to be effective. They also indicate, however, that, at minimum, further “real world” testing should be done to confirm whether higher power levels, at least on highly directional point-to-point paths, can be accommodated.

### III. Conclusion

In sum, the Commission has identified the need to utilize spectrum flexibly and efficiently to provide additional wireless backhaul services. DTVN believes that MVDDS licensees have the potential to help fulfill this need. Accordingly, in order to best achieve the agency’s goals in this proceeding, DTVN respectfully urges the Commission to implement a further rulemaking proceeding to assess the feasibility of authorizing MVDDS licensees to use higher power levels to provide point-to-point services. At minimum, DTVN submits that the Commission should be open to authorizing MVDDS licensees to conduct field tests to confirm their ability to operate at higher power levels to provide these services while protecting others authorized to use the band from impermissible interference.

Respectfully submitted,

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